

P.O. Box 400, Grand View, ID 83624 P 800.274.1516 F 208.834.2919

May 31, 2019

Ms. Natalie Creed Hazardous Waste Bureau Chief Idaho Department of Environmental Quality 1410 North Hilton Boise, ID 83706

RE: US Ecology Idaho (USEI) Site B – IDD073114654

May Monthly Progress Report on Recovery Actions Related to the November 17, 2018

Explosion at the USEI Site B Facility ("Incident")

Dear Ms. Creed:

As requested in IDEQ's letter dated December 18, 2018, USEI is hereby submitting the monthly progress report for May 2019. This report details the activities undertaken in the recovery process for the month of May. This report covers activities from April 26 through May 24, 2019. The next report will cover activities from May 25 through June 21, 2019.

Throughout the month USEI has performed various operations to evaluate the facility and bring it back to a state of compliance following the Incident. The actions taken during the month are outlined below.

After receiving approval from IDEQ on February 7, 2019, USEI began receiving loads of bulk material for direct landfill on February 8, 2019. USEI is continuing to receive small amounts of material from the RTF at this time. During April, USEI provided IDEQ with a PE certification for the Stabilization Facility as well as a certification that all ancillary equipment needed for solidification operations is available. IDEQ subsequently provided an authorization, dated April 11, 2019, allowing USEI to resume solidification operations at the Outdoor Stabilization Facility. As a first step, laboratory and operations personnel created and gathered batches of stored containers for solidification. Nine batches of waste that were received for solidification prior to the Incident - totaling 205 containers – have been solidified and placed in the landfill since the last report.

USEI also received the following wastes since the last report:

- Tankers for solidification and disposal: 10
- RTF vac tankers for evaporation: 3
- Loads of bulk solids for direct disposal: 156
- Drum loads: 20
  - o Containers received for solidification: 490 (437 solidified and disposed)
  - Containers received for direct landfill: 292 (275 disposed)



Inspections – Inspections have been performed as required and documented; any area that could not be inspected due to structural damage or due to other safety factors was noted on the inspection form.

Leachate Management – USEI has completed leachate inspections and removed accumulated leachate as required. Removed leachate has been filtered through the leachate treatment system and has been discharged to site surface impoundments for evaporation. Leachate levels for all areas, including those observed in the Evaporation Pond, continue to be in keeping with levels associated with normal operations.

Precipitation – Collected precipitation has been monitored and removed from container storage and RCRA tank areas as needed. All precipitation removed from these areas was discharged to the site surface impoundments for evaporation. Accumulated precipitation is removed from Pad 7 as area conditions allow. Regular removal of liquids from the area will commence once USEI's contractor ESI completes work on the building.

Collected precipitation from the Indoor and Outdoor Stabilization facilities has been collected and added to Tank #2 as needed. No sampling was performed and no water was discharged from the tank during May.

On January 30, 2019 the sumps for Mix Bin #1 (MBT 1) were accessed for sampling. It was noted that the caps had been blown off both ports and that a large amount of water was present in both the primary and secondary sumps. The water level was not measured but was estimated to be approximately 18 inches deep. During the month of May, operations to prepare the Containment Building for demolition were carried out and many of the hazards that were previously present were removed. On May 21, 2019 the primary and secondary sumps for the Mix Bins were pumped and the following amounts were removed from the sumps:

- MBT 1 Primary 100 gallons
- MBT 1 Secondary 300 gallons
- MBT 2 Primary 25 gallons
- MBT 2 Secondary 100 gallons

All removed liquid was placed into Tank #2 for storage until laboratory analysis of the tank contents are complete.

Container Management – Container movements for the period from April 26 through May 24, 2019 have been submitted to Albert Crawshaw of the IDEQ via email. Containers that became damaged or degraded as a result of the Incident are being managed appropriately by being covered, repackaged, or overpacked as needed. USEI has prepared and shipped loads of containers off-site to continue decreasing the container inventory on site. Since the last report, six loads of material were shipped off-site; five loads were shipped to US Ecology in Beatty, NV, and one load was shipped to the Green America Recycling facility in Hannibal, MO.

Removal of containers that were within the debris side of the Containment Building at the time of the Incident began on April 15, 2019. A copy of the Safe Work Plan for removal of the containers was submitted to IDEQ via email on April 15, 2019. At this time, all containers have been accessed and removed from the building. All damaged containers were repackaged or overpacked and moved out of the building to other permitted storage areas around the site, with the exception of one batch of sixty drums, which were removed from the building and shipped to the Beatty, NV facility for treatment and disposal. Removal operations were completed on May 13, 2019. A total of 623 containers were removed from the Containment Building. Inophos waste that was staged in Sort Floor 2 when the Incident occurred was placed into a roll-off bin for storage. The bin remains in the debris side of the Containment Building at this time.

Treatment bins at the Outdoor Stabilization Facility that were in process at the time of the Incident were covered on December 21, 2018. The in-process bins remain covered at this time. The bins are inspected on a daily basis; water is removed from the tarps and they are re-tightened as needed. The waste will be processed as hazardous waste treatment operations at the facility resume. On April 11<sup>th</sup>, the bins were moved to the south end of the east track at the Outdoor Stabilization Facility to prepare the area for commencement of solidification activities. There was no change in the status of the bins during the month of May. The bins will remain in the area until treatment of hazardous wastes is allowed to begin again.

Evidence Material –Evidence from the Incident remains in storage at Container Storage Area 1 (CSA 1) at this time. This includes tagged debris pieces, various split samples that have been collected, empty drums from the back of the haul truck at the Containment Building, containers of burnt magnesium (WSID # 29857-0) and floor sweeps (WSID # 29853-0), and overpack drums of magnesium fines (the material involved in the explosion, WSID # 29856-0). All remaining containers of magnesium material from Reade Manufacturing Company, the company whose waste stream was being treated when the explosion occurred, remain on site at this time.

(b) (6), (b) (7)(A), (b) (7)(C)

timetrame for storage of these materials is unknown at this time. USEI personnel accessed the secured area on May 20, 2019 to re-cover containers after one of the tarps came loose.

Baker Risk has received analytics for all samples collected, and has determined the cause of the Incident. Representatives of the internal investigation team met with IDEQ on May 14, 2019, to discuss the findings of the investigation.

Cleanup Material — Cleanup of debris continued through May. Gathered tin and larger pieces of foam insulation have been placed into roll-off bins; small pieces of foam were bagged and then placed into roll-off bins. The bins were placed into storage at CSA 1. The majority of material outside the footprint of the Containment Building has been cleaned up at this time. Additional material will continue to be cleaned up as it is identified. During May, all containers inside the debris portion of the Containment Building were removed. All damaged containers were repackaged or overpacked. Debris material covering the floor on the stabilization side of the building was also removed. Removal of the debris from the stabilization side was completed on

May 17, 2019. The excavator involved in the incident remains in the building at this time, but the majority of other debris has been removed. Operators followed a safe work plan while removing the debris and containers from the building. Additional cleanup within the fenced area around the Containment Building was also completed in May. This cleanup effort was undertaken once further observation of the building was completed, to ensure that the area was safe. USEI will prepare and submit to IDEQ a plan for the partial closure of the Containment Building by June 28, 2019. All cleanup materials will be handled in accordance with the partial closure plan, once approved by IDEQ.

Material from MBT 1 will be removed beginning on June 3, 2019 by USEI's contractor H2O Environmental. The material is to be removed by sweeping/shoveling rather than with mechanical means. The material will be placed into drums and will be placed into the fenced storage area at CSA 1 with other evidentiary materials that are being stored there.

USEI has continued monitoring the area outside the fence for additional foam material. No additional material was identified during the May inspection of the fence. Small amounts of additional material continue to be picked up as they are identified. USEI personnel will continue monitoring the fence line on a weekly basis to ensure material is not exiting the facility.

Facility Structures – The Containment Building sustained major damage in the Incident and will need to be repaired/rebuilt. An initial evaluation of the structure by the insurance company and a structural engineer was performed on the stabilization side of the Containment Building on January 29, 2019. Steel and other building debris have been removed so the slab and foundation can be further evaluated. The Debris Side will be evaluated further since debris and containers have been removed and the pad is visible for inspection. US Ecology has retained ABCO Engineers to act as project managers on the removal/closure and reconstruction of the Containment Building facility. Contact information for ABCO Engineers was provided to Mr. Lon Stewart via email on February 27, 2019. ABCO has written a bid package and provided it to four potential bidders. A bid walk with contractors wanting to bid on the demolition project is scheduled for June 5, 2019. Demolition will begin after June 24, 2019. USEI's contractor H2O is scheduled to begin decontamination of the Containment Building prior to the start of demolition.

The chain link fencing remains intact around the Containment Building, the administration building complex, and the secured area in CSA 1.

The site vehicle wash building was removed January 8, 2019. Water to the truck wash area was restored on January 16, 2019. Up to January 16, 2019 a portable water source was needed to operate the pressure washer. USEI has received a quote for reconstruction of the Truck Wash building. The project start date is unknown at this time.

Pad 7 was evaluated by USEI's contractor ESI so that all materials needed for repair could be ordered. ESI began dismantling the roof and walls of the building on April 15, 2019. Removal of the metal sheeting, foam insulation, and metal girders was completed on April 24, 2019. All repair materials were received on May 10, 2019. ESI returned to the site to begin repair operations on May 13, 2019. Repairs will continue until complete. Once structural repairs are

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complete, USEI's electrical contractor will return to complete electrical installation to the building.

During repairs to the metal structure of the Pad 7 building, the contractor removed a portion of the concrete curbing in Subcell 7G for installation of the east emergency exit door. USEI will include changes to the containment volume with the next Class 3 modification for the facility which will include all changes to site administration structures, truck scale location, and changes to the stabilization building. The new number of containers which can be stored in the subcell will be calculated and implemented prior to storage activities resuming in the building.

The site water system was partially evaluated/repaired on January 16, 2019. Broken lines at the administration/decon areas were capped during the evaluation and repaired on January 16. All water tanks were thickness-tested on February 6, 2019 and found to be functional. Water to the Outdoor Stabilization Facility was restored April 19, 2019. USEI has received a quote for reconstruction of the Pump House building. USEI's insurance adjuster has given their approval to proceed with the rebuild of the building. The project start date is unknown at this time.

The Old Shop/Quonset hut was previously reported to be minimally damaged. The building was shored up by USEI's contractor NorthStar on January 16, 2019. The building was evaluated by USEI's insurance adjuster on January 29, 2019 and was determined to be a total loss. The building will continue to be used for storage of items until repairs to the New Shop are complete. Items will be removed to the New Shop once repairs are completed by USEI's contractor. During the week of March 18<sup>th</sup> the wood-framed offices and conference room upstairs and on the east end of the Quonset hut were removed and placed into Landfill Cell 15. The outer shell of the Quonset hut remains in place at this time. The plan at this time is to replace the metal siding on the Quonset hut and continue to use it for maintenance storage. Repairs to the Quonset hut began the week of May 5, 2019 and were completed May 14, 2019.

Repairs to the civil defense siren were completed and the siren was tested on April 23, 2019. The siren is now functional and will be added to the list of emergency equipment during the next permit modification.

The Outdoor Stabilization Facility office is currently being used to house the fingerprint lab in the near term. A tentative design for the site laboratory has been drawn up. The new laboratory building will be located south of the main administration office in the new office complex, located near the front gate. Manufacture of the lab building is projected to be complete by the middle of September 2019.

A portable shower/toilet unit located in the temporary administration trailer area was put into service on January 10, 2019. The unit contains four separate shower/toilet/sink stations. An additional unit with men's and women's restroom stations (toilets/sinks only) is present in the area and is functional.

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Facility Personnel – Since USEI's last report three employees, Danny Martinez, Cynthia Rodriguez, and RJ Resner have left employment with USEI. An updated facility employee list is included with this letter.

If you have any questions regarding the content of this letter or require additional information, please call me or Rebecca Hogaboam at (208) 834-2275.

Regards.

Noel A. Bailey Technical Manager

cc: Barbara McCullough, EPA Region 10

Albert Crawshaw, IDEQ Peter Purchase, IDEQ Brian Gaber, IDEQ Garrett Bright, IDEQ Andrew Marshall, USE

Enclosure

	Team Member	Hire Date	Title
	Tra	nsfer, Storage,	Disposal Facility
1	BAILEY, NOEL	12/29/2003	Technical Manager
2	CERECERES, TINO		Approvals Coordinator
3	CLARK, DAVID	4/8/2013	
4	CLARK, SHILO		Security Guard
5	EVENS, JASON		General Manager
6	HALL, STEPHANIE	6/1/2006	Chemist
7			Receiving Coordinator
8	HOGABOAM, REBECCA	6/1/2015	EH&S Compliance Manager
	JENSEN, JUSTIN		Rad Safety Specialist
	LAWSON, AYLA		Receiving Coordinator
	LAWSON, DEVANI	10/22/2007	
	LIVINGSTON, SOPHIE		Transportation Clerk
	LUTRELL, JENNIFER		Customer Service Specialist
	MAGERS, JUDITH		Office Administrator
	SCHMITZ, CORIAN		Receiving Lead
	SCHWAGER, ELIZABETH		HR Generalist
	SIMPER, KARLITA	6/13/2011	EH&S Compliance Specialist
1	BIRMINGHAM, JACK	5/12/2003	Operations Supervisor
2	CHRISTIANSEN, RICK	8/2/1992	Sr Operator
	CUTLER, ROBERT		Senior Operator
4	FERRELL, CASEY		Lead Operator - landfill
5	HAZELL, LEE		Operator
6	HERERRA, FREDY	1/11/2016	Operator
7	IRELAND, JOSEPH	9/28/2007	Mechanic
8	LEONARD, CHET	5/1/2006	Senior Operator
9	LINDQUIST, ROBERT	9/1/1999	Mechanic Supervisor
0	POLLARD, RICKEY	4/15/1987	Operator
2	ROBERSON, KENNETH	9/6/1988	Operation Manager
3	ROGERS, BENJAMIN		Operator
4	VANCE, ROBERT		Lead Operator
5	WHITTED, DALE		Mechanic
	WILSON, DANIEL		Senior Operator
200	WOODRUFF, DANE	10/31/2005	
		D-:1 F	
1	HASTINGS, JONNY	Rail Fac 7/16/2018	
2	LOPES, JOAO		Operator
3	MONASTERIO, JOSH		Lead Operator
	MORENO, ANDREW		Operations Supervisor/ Rail Foreman
	SPENCER, JUSTIN		RTF Operations Supervisor
- 1	WININGS, ANDY		Operator

Field Services, RAD	Casual worker
Field Services, RAD	Casual worker

Jim Hancock Bruce Cameron